

Patent [19]

[11] Patent Number: 2000000293

[45] Date of Patent: Jan. 07, 2000

[54] AIR CLEANER FOR VEHICLE

[21] Appl. No.: 10166496 JP10166496 JP

[22] Filed: Jun. 15, 1998

[51] Int. CL⁷ A61L00900 ; B01D05304; B01D05386; B60H00306

[57] ABSTRACT

PROBLEM TO BE SOLVED: To solve the visual problem of an air cleaner for vehicles having a deodorization filter which allows the regeneration of a deodorization function by the effect of a photocatalyst.

SOLUTION: The deodorization filter 4 used for the air cleaner 1 is constituted by attaching photocatalyst particles of titanium dioxide, or the like, to an adsorbent consisting of a porous material (for example, active carbon filter). The titanium dioxide is a photocatalyst which exhibits extremely highly active oxidation power by irradiating the dioxide with UV rays of about 380 nm wave length. A cover 7 for covering the upper part of the deodorization filter 4 is formed by using a resin material of the material quality that the transmittance to light wavelengths is high in a UV region and is low in a visible ray region. Namely, the UV transmittance of the material constituting this cover 7 is $\geq 50\%$ and the visible ray transmittance thereof is below 50%. As a result, the transmission of the UV component of the sunshine and the irradiation of the deodorization filter 4 with this component are made possible. In addition, the seeing-through of the internal structure of the apparatus may be prevented by approximately shutting off the visible rays.

* * * * *